

Night Hike

Time: 1 hour

Location: Any place outside away from light, preferably on a trail.

Supplies:

- 1 or 2 sets of color cards
- 1x bag of crushed wintergreen mints
- 2x pens/pencils
- Flashlight (for emergencies)
- 1x laser pointer (optional)

Rules:

- Try to use no light (you may want a flashlight for emergencies but it's a good idea to let your eyes adjust).
- Keep the group close. Follow sandwich rule if there is more than one parent/guardian. (Adult in front, adult in back).

Lesson 1: Adaptations (while walking to first location)

Time: 5 minutes

Ask: *What is an adaptation?* Answer: A change where a species becomes better suited to its environment.

Ask: *What animals have adaptations for nighttime?* (No correct answer. Just to get them thinking about animals and how they survive in the night).



Lesson 2: Pencil Activity

Location: About .5 miles away from starting location

Supplies: Pencils

Time: 10 minutes

Goals: Practice Observation Skills

1. Get into a circle (or as much of one as you can depending on the number of people).
2. Ask a volunteer to close their eyes, clang two pens or pencils to the left, right, above, behind, and in front of the volunteer. Each time you clang the pens the person should say which direction they think they hear the sound from. Try with another volunteer.
3. After the second or third volunteer,
Ask: *What do you notice?*
Ask: *Which direction was hardest to observe? Why?*
4. Discuss ear adaptations. Ask: *Which animals have ear adaptations?* Answer: *Elk, deer, rabbits, all big ears to hear better (among others).*

Lesson 3: Sensory Activity

Location: Walk another .5 miles to a location that does not have any source of light.

Discussion Time: 10 minutes

Goals: Learn about different senses to prepare for the solo hike.

Ask: *Can you think of a happy memory you have that is centered around a sight, smell, taste, touch, or sound?*



Lesson 3: Sensory Activity (continued)

1. Hear:

- Tell the group to close their eyes. Listen to the surroundings for 3 minutes. Each time a student hears something, ask them to raise their hand. At the end, ask:
 - ◊ *What did you notice about each sound?*
 - ◊ *What do you think made that sound?*

2. Touch:

- Tell the group to think about what they feel. Ask:
 - ◊ *What do you feel in your feet?*
 - ◊ *What do you feel in your legs?*
 - ◊ *What do you feel in your Arms?*
 - ◊ *What do you feel on your head?*
 - ◊ *What does the air feel like against your skin?*
 - ◊ *What does the air feel like in your nostrils as you breathe?*
 - ◊ *How does the ground feel beneath your feet?*

3. Sight:

- Focus in on just the colors around you. Ask: *What colors can you see?*
- Now try to ignore the colors and focus in on just the shadows and light around you like in a black and white photo
- Now don't focus on anything, but instead try to look at everything in front of you at the same time.

4. Smell:

- Ask: *Can you smell anything in the air?*
- Ask: *Can you notice temperature and humidity differences by smelling? (explain humidity if necessary).*

Lesson 4: Solo Night Hike

Location: Same as Sensory Activity

Time: 10 minutes (depending on how many students are present).

Goals: Practice using observation skills and sensory skills to walk alone at night.

Tell students you will be walking ahead on the trail, about 50 steps. Tell each student to walk alone on the path and hike to the same point where you are. Do not go far, and make sure the students know that they can go with a partner if they are scared as long as they are silent.

1. Remind students before you begin:

- This is a silent activity.
- Please be respectful of other's experience and take it seriously.
- Commit to this activity because you will get out of this what you put into it and it is a great opportunity to try something new in the safest way possible!
- Wait to start walking until the instructor says "go."
- This is a clearly marked trail. It's impossible to get lost, and we will not be hiking that far, so that I wouldn't hear you if you yelled for me.

2. Once finished, ask the group:

- *How did it feel to be alone in nature at night?*
- *How did being aware of your senses help you experience this solo hike better?*

Lesson 5: Color Cards

Location: Back home .5 miles

Supplies: Pieces of colored paper

Time: 10-15 minutes

Goals: Learn about how our eyes adapt to darkness.



1. Hand out a piece of colored paper to each student.
2. Have students partner up with people who they think have the same color of paper.
3. Have students guess what color their piece of paper is.
4. Bring up light and reveal the color of the papers
5. Discuss Rhodopsin (it is a protein that builds up in your eyes at night when there is no white or red light. The more it builds up the better you can see in the dark, but the less color you can see. It is reset when looking at light, which is why it is blinding/hurts).



Lesson 6: Wintergreen Mints

Location: Same as Lesson 5

Time: 10 minutes

Supplies: Mints

Goal: Have fun!

The next activity is just for fun, but can show you how even nighttime can surprise you.

1. Give each student a piece of a wintergreen mint
2. Have students find partners or have them group up
3. Look at partner's mouth while chewing on piece of wintergreen mint
4. Define Triboluminescence: The emission of light from something caused by rubbing, scratching, or hitting. This is what is happening when someone bites into the mints.
5. Ask: *What is something in nature that you wonder about? Something that happens or might happen at night specifically?*

Start heading back home (Check out the stars as you walk home!)

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